JVC

SCHEMATIC DIAGRAMS

COLOR TELEVISION

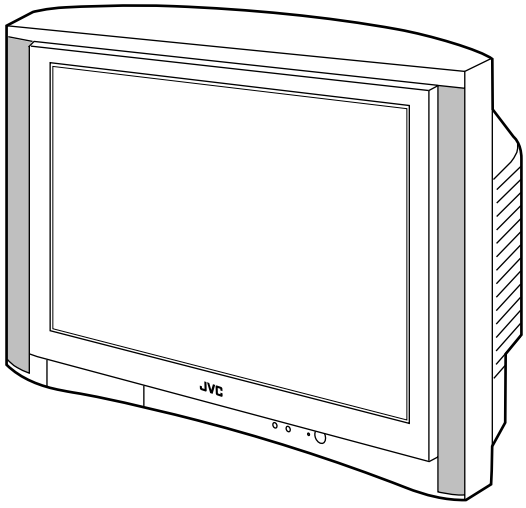
BASIC CHASSIS
CH

AV-29W33 /T
AV-29W33B /T

CD-ROM No. SML200212

RM-C1019-1H
[AV-29W33 /T]

RM-C1018-1H
[AV-29W33B /T]



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No. 52080
Nov. 2002

AV-29W33/T
AV-29W33B/T STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1) Input signal : Color bar signal
(2) Setting positions of each knob/button and variable resistor : Original setting position when shipped
(3) Internal resistance of tester : DC 20kΩ/V
(4) Oscilloscope sweeping time : H ⇒ 20μS/div
: V ⇒ 5mS/div
: Others ⇒ Sweeping time is specified.
(5) Voltage values : All DC voltage values

∗Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

• In the PW board : R1209 → R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1) Resistors

• Resistance value

No unit	: [Ω]
k	: [kΩ]
M	: [MΩ]

• Rated allowable power

No indication	: 1/16 [W]
Others	: As specified

• Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Non-Flammable resistor
FR	: Fusible resistor

∗Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2) Capacitors

• Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

• Withstand voltage

No indication	: DC50[V]
AC indicated	: AC withstand voltage [V]
Others	: DC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example] : Capacitance value [μF]/withstand voltage[V]

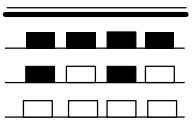
• Type

No indication	: Ceramic capacitor
MY	: Mylar capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3) Coils

No unit	: [μH]
Others	: As specified

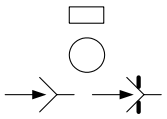
(4) Power Supply



∗Respective voltage values are indicated

(5) Test point

(6) Connecting method



(7) Ground symbol

⊥ : LIVE side ground
⏥ : ISOLATED(NEUTRAL) side ground
⏚ : EARTH ground
▽ : DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏥) side GND. Therefore, care must be taken for the following points.

(1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
(2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time with a measuring apparatus (oscilloscope, etc.). If the above precaution is not respected , a fuse or any parts will be broken.

• Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

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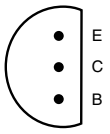
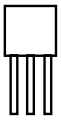
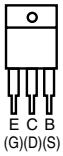
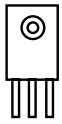
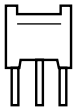
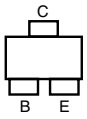
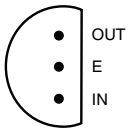
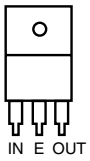
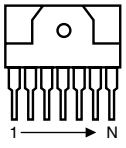
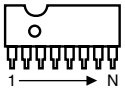
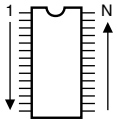
SEMICONDUCTOR SHAPES

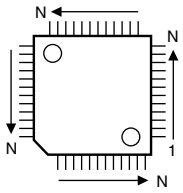
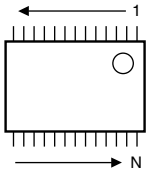
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

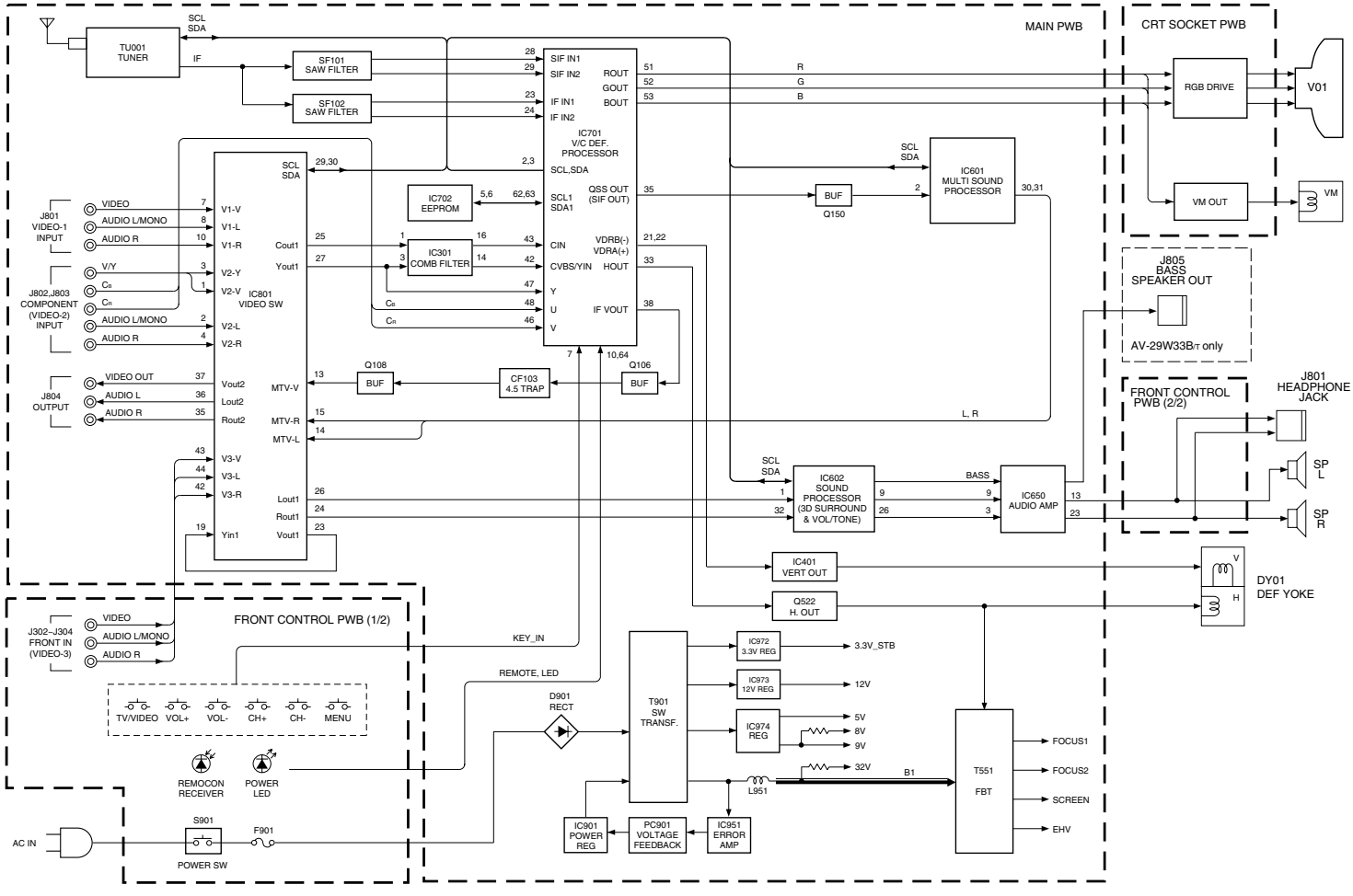
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

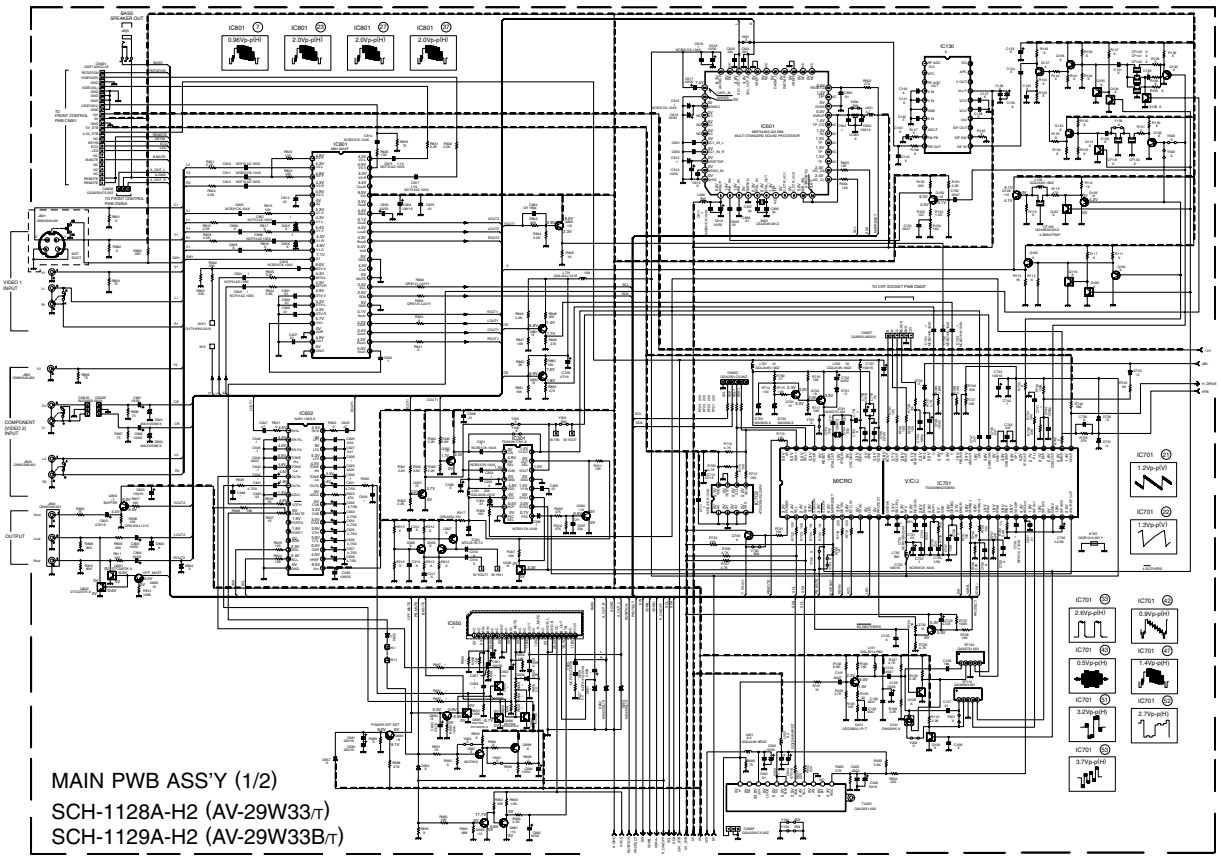
BLOCK DIAGRAM



AV-29W33
AV-29W33B

CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM (1/2)



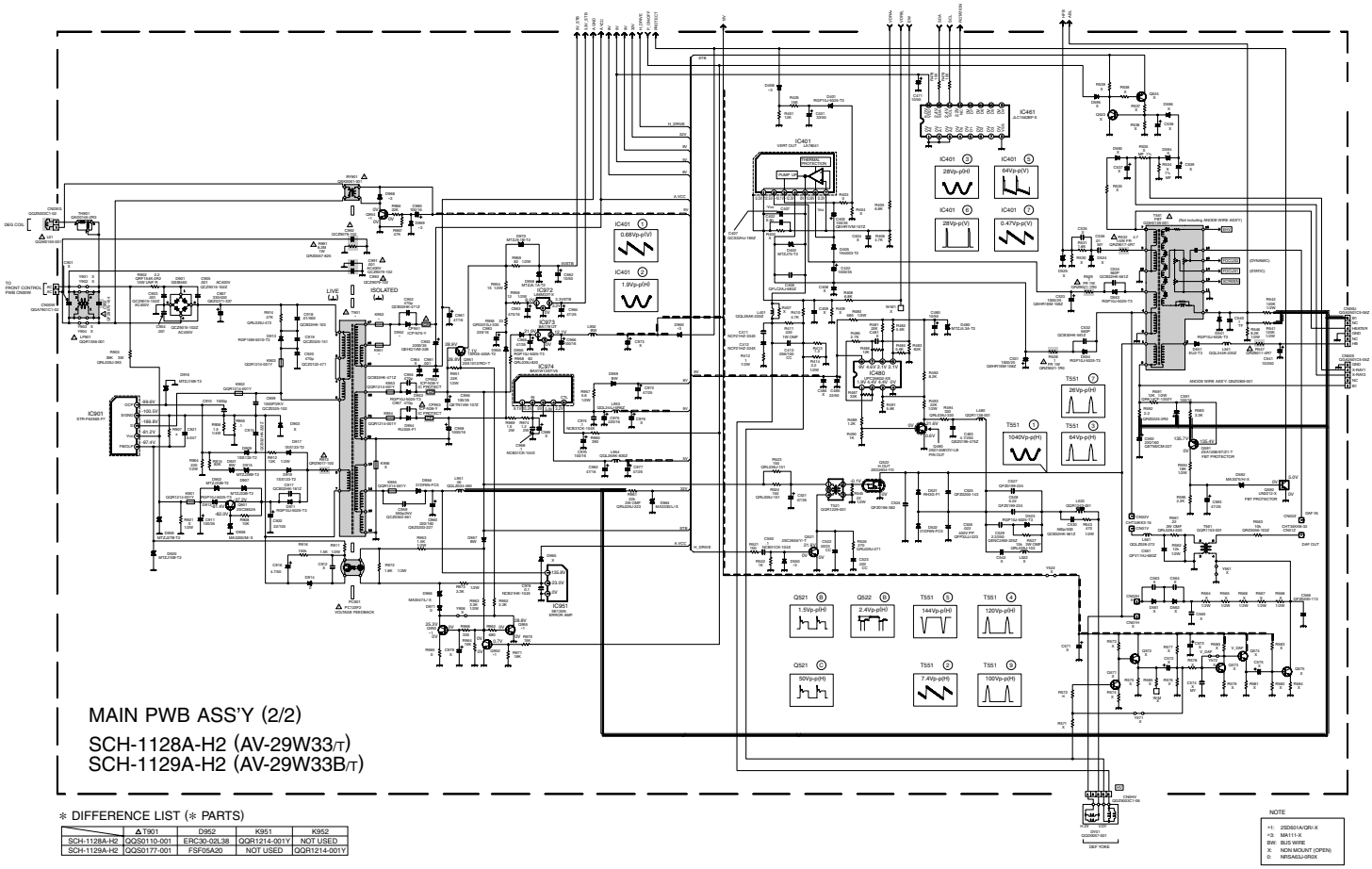
∗ DIFFERENCE LIST (∗ PARTS)

	R629	R630	R651	R652	R658	R659	R666	R667	R668	R669	R695	C628	C642
SCH-1128A-H2	1kΩ	1kΩ	10kΩ	10kΩ	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	15kΩ	0.022μF/50V	NOT USED
SCH-1129A-H2	0kΩ	0kΩ	8.2kΩ	8.2kΩ	8.2kΩ	8.2kΩ	10kΩ	3.9kΩ	100kΩ	8.2kΩ	10kΩ	0.082μF/50V	10μF/50V

	C648	C649	C657	C658	D651	D656	Q662	Q663	IC650	J805
SCH-1128A-H2	0.015μF/50V	0.015μF/50V	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	AN5277	NOT USED
SCH-1129A-H2	NOT USED	NOT USED	10μF/50V	2200μF/35V	MA3330/L-X	MA111-X	DTC323TK-X	UN2212-X	AN7585	QNS0100-001

NOTE
∗3: MA111-X
∗7: 2SC1740S/QR/-T
∗8: UN2212-X
∗9: 2SB709A/QR/-X
∗10: 2SD601A/QR/-X
BW: BUS WIRE
X: NON MOUNT (OPEN)
0: NRSA63J-0R0X

MAIN PWB CIRCUIT DIAGRAM (2/2)

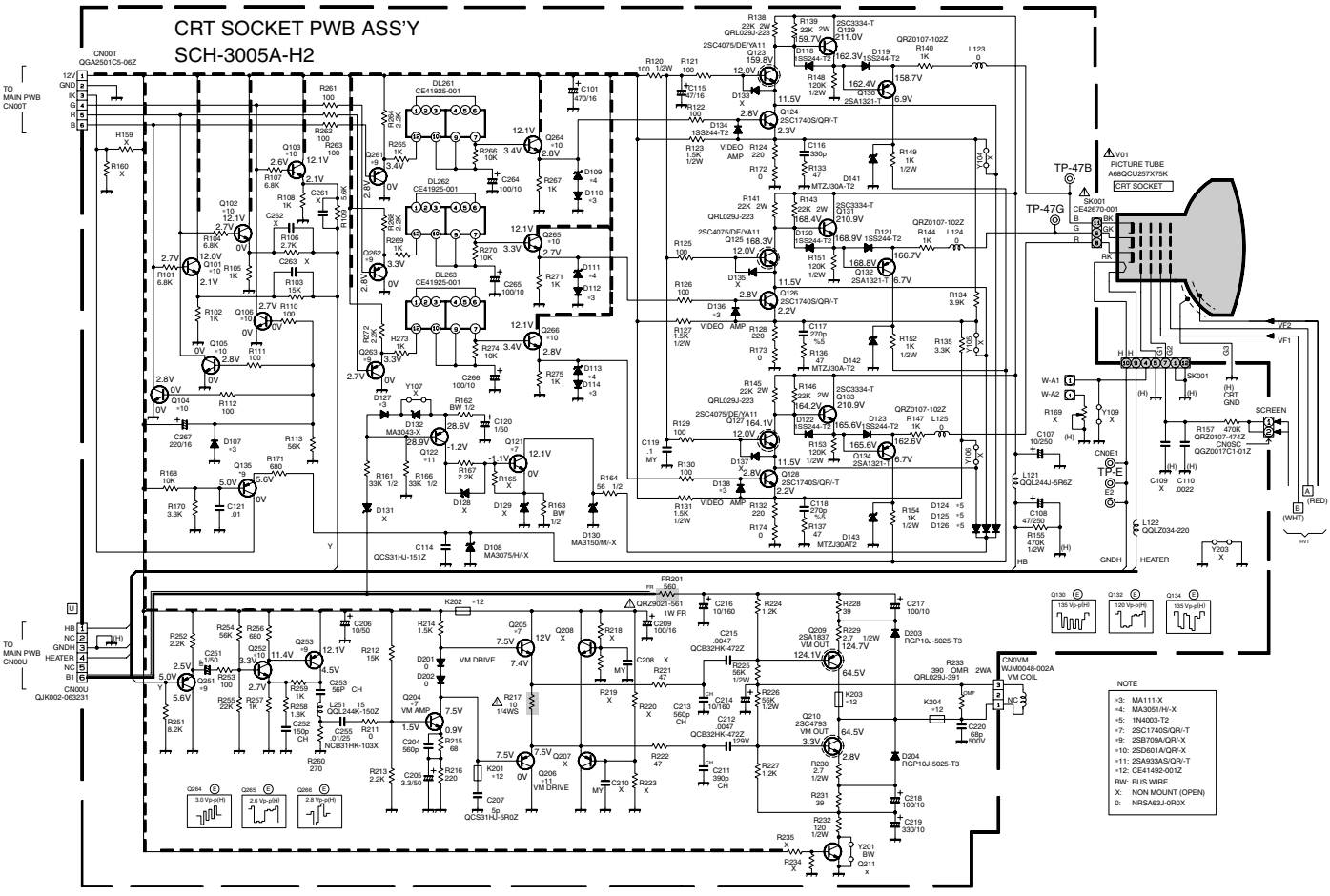


∗ DIFFERENCE LIST (∗ PARTS)

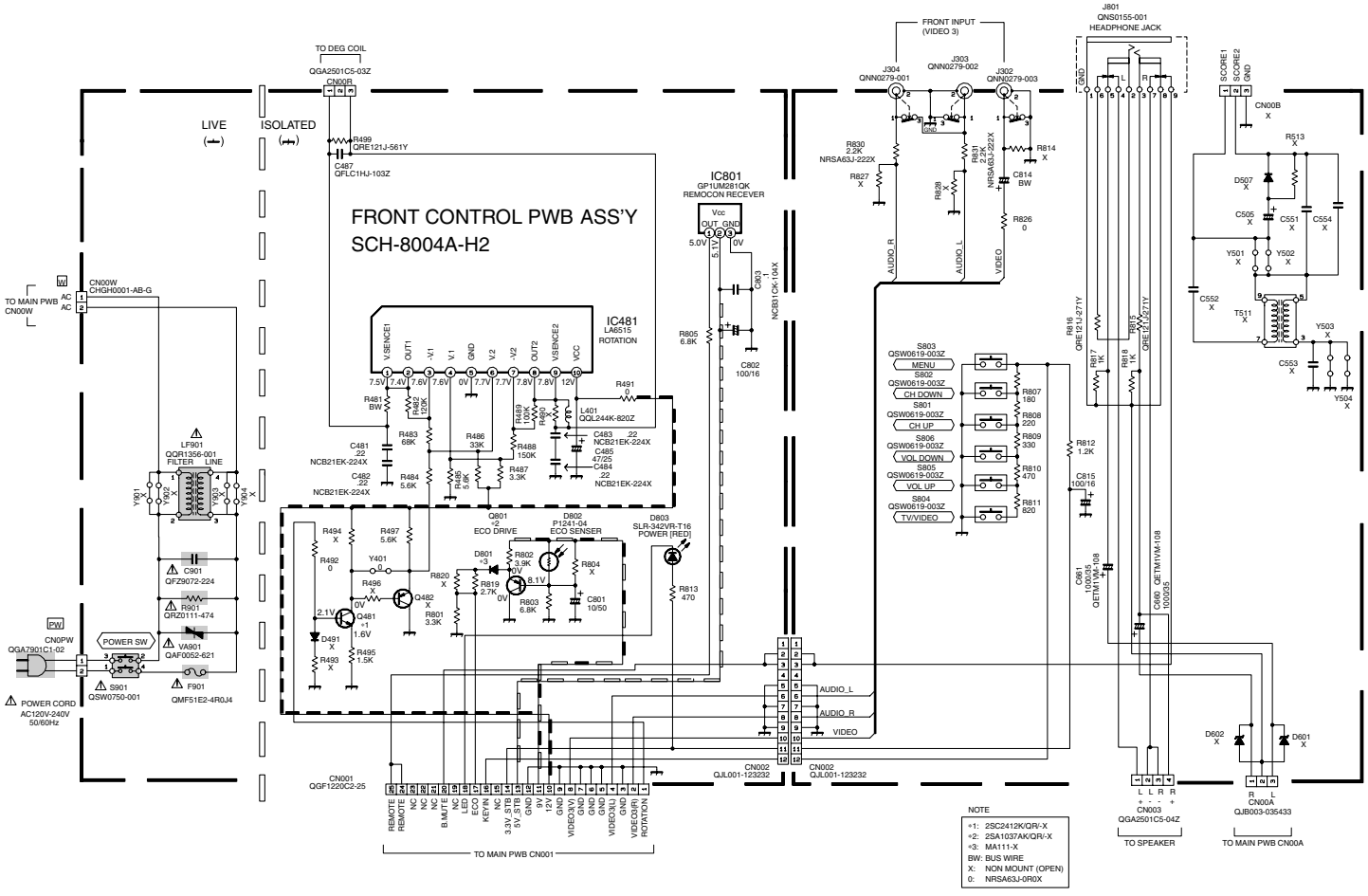
	△T901	D952	K951	K952
SCH-1128A-H2	QQS0110-001	ERC30-02L38	QQR1214-001Y	NOT USED
SCH-1129A-H2	QQS0177-001	FSF05A20	NOT USED	QQR1214-001Y

NOTE
+1: 2SD601A/CR/-X
+3: MA111-X
BW: BUS WIRE
X: NON MOUNT (OPEN)
◇: NRSA63J-0R0X

CRT SOCKET PWB CIRCUIT DIAGRAM



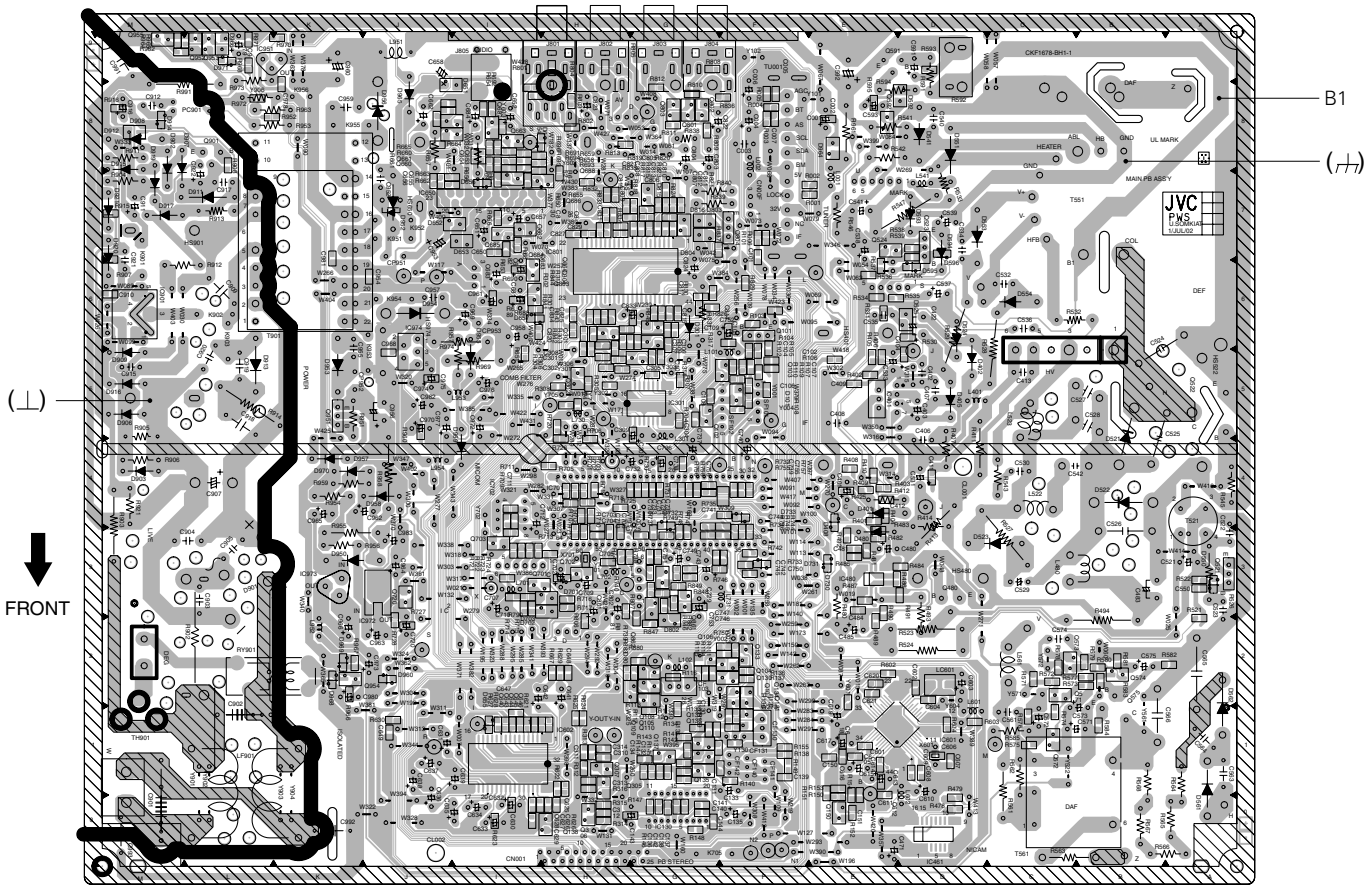
FRONT CONTROL PWB CIRCUIT DIAGRAM



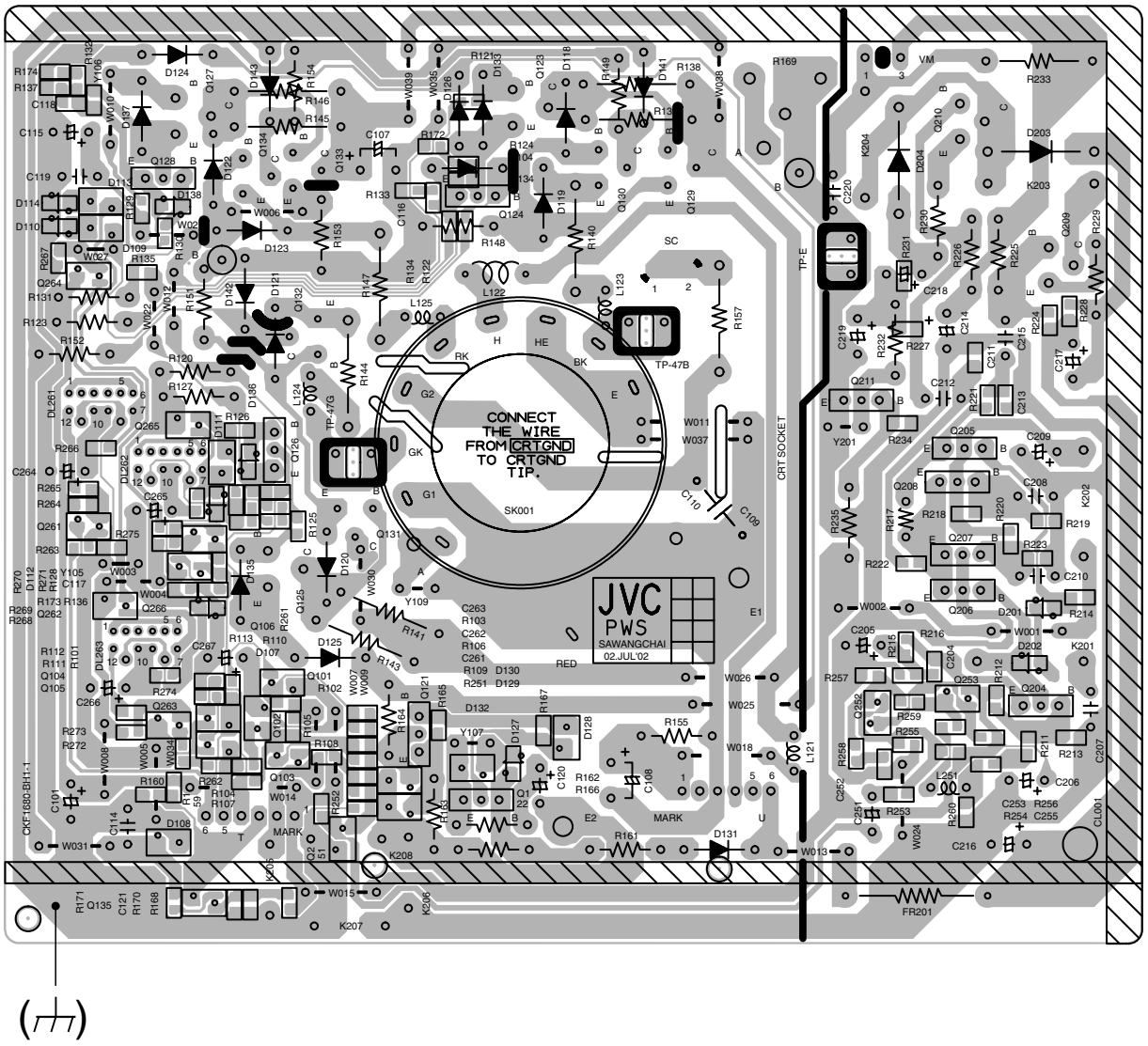
AV-29W33
AV-29W33B

PATTERN DIAGRAMS

MAIN PWB PATTERN

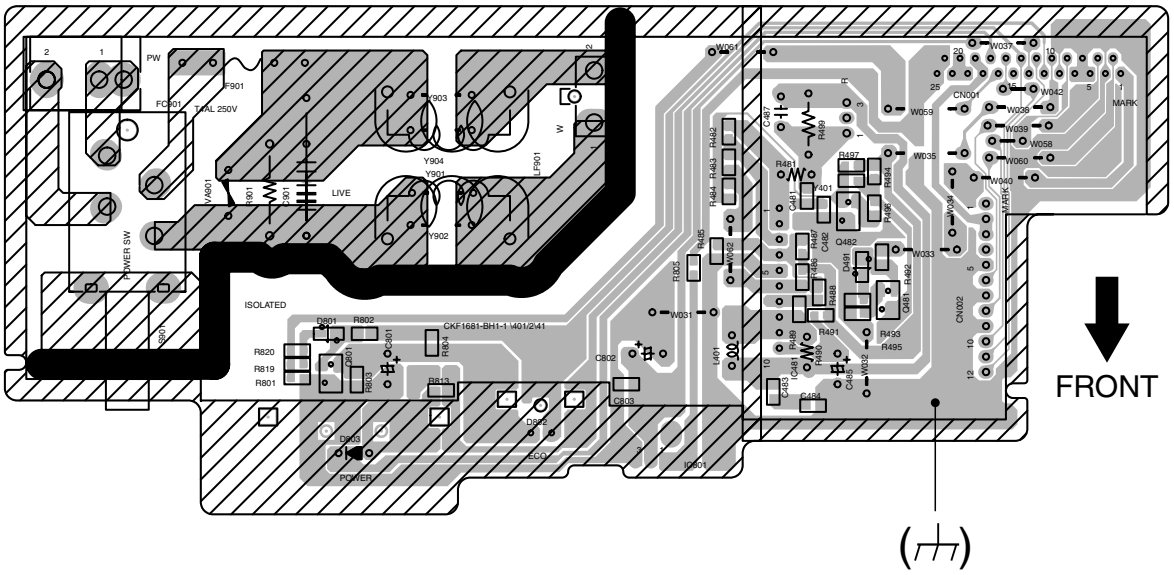


CRT SOCKET PWB PATTERN

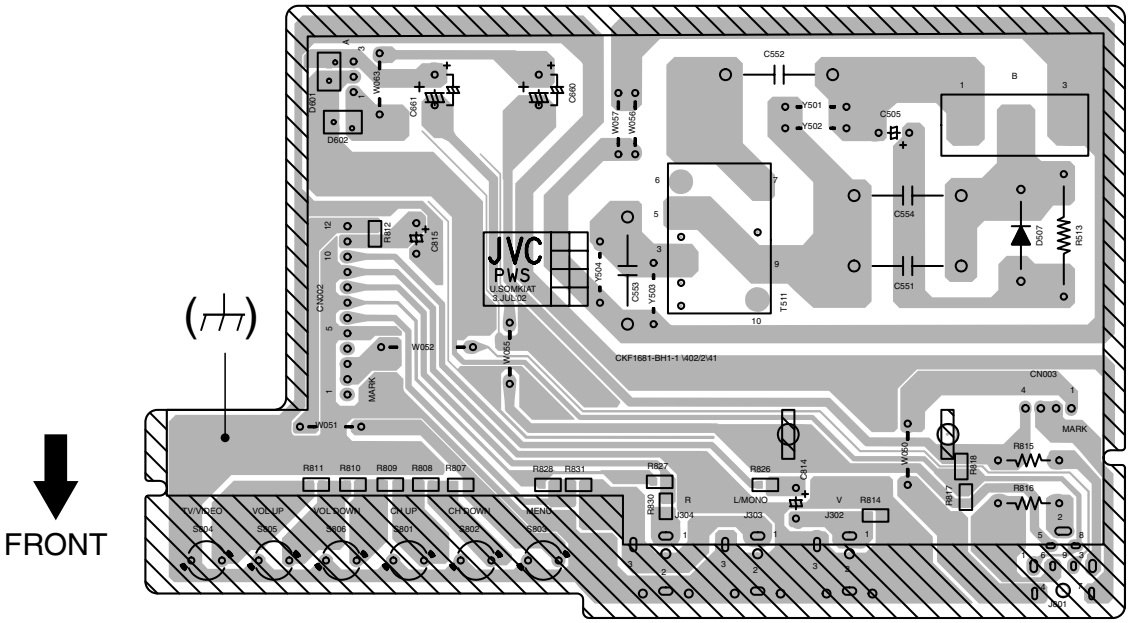


FRONT CONTROL PWB PATTERN

– FRONT CONTROL (1/2) –



– FRONT CONTROL (2/2) –



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